United States Department of Agriculture
Natural Resources Conservation Service

Air Conservation

Poor air quality is a threat to the health of humans, wildlife, ecosystems, crops, and the ozone layer. The Natural Resources Conservation Service (NRCS) helps people breathe easier by offering assistance to address air quality issues on privately owned agricultural land.

NRCS works with the agricultural community to address air quality issues such as particulate matter, ozone and greenhouse gas emissions and airborne odors generated through farming operations. Through cooperative conservation partnerships, NRCS develops farming practices that improve air quality, and offers financial incentives and technical assistance to private landowners interested in implementing conservation practices. NRCS also coordinates the Agricultural Air Quality Task Force, whose goals are to strengthen vital research efforts related to agricultural air quality and determine cost-effective ways the agricultural industry can contribute to the improvement of air quality.

Conservation practices help farmers and ranchers reduce wind erosion and dust emissions by keeping soil on the fields and out of the air. These practices include: conservation tillage, cover crops, and windbreaks or shelterbelts, and feed and waste management. Carbon sequestration— the process of removing carbon dioxide from the atmosphere and storing it in biomass or soil as organic matter — is used to reduce carbon dioxide levels. Reducing tillage and adding cover crops increases the sequestration of carbon into the soil. Grazing and forestry practices can also be managed to maximize carbon sequestration in plants and soil biomass.

Agricultural practices can have an impact on air pollutants, and conservation can assist farmers with meeting regulations set by federal, state, and local regulatory agencies. NRCS works with producers to install conservation practices that will help keep their property within regulations. Some areas of the country can persistently exceed the national standards. (See map).

NRCS works with partners to develop, test and implement tools that assist private landowners with land use decisions that impact air quality. The agency has invested approximately $60,000 a year toward the development and testing of the Wind Erosion Prediction System (WEPS) that allows NRCS to accurately predict soil loss by wind, which is essential for reducing air pollution from wind-blown sources. NRCS also worked with several partners to develop COMET-VR, which allows farmers to estimate changes in fuel use, fertilizer and carbon storage on their land over a ten-year period based on the different conservation practices they are willing to install.

NRCS is committed to promoting practices that improve air quality and offers financial and technical assistance to help private landowners enact conservation practices on their land. NRCS voluntary programs include:

- Conservation Security Program (CSP) – This program rewards landowners who have implemented effective conservation practices on their land.
- Conservation Technical Assistance (CTA) – This program provides the technical assistance, including direct cooperative conservation

planning, design, and implementation assistance, that helps people conserve, maintain and improve their natural resources.

- Environmental Quality Incentives Program (EQIP) – This program helps eligible participants install or implement structural and management practices on their land.
- Conservation Innovation Grants (CIG) – These grants stimulate the development and adoption of innovative conservation approaches and technologies for environmental enhancement and protection in conjunction with agricultural production.
- Wetlands Reserve Program (WRP) – This program assists landowners with restoring and protecting wetlands through conservation easements and cost-share agreements.
- Grassland Reserve Program (GRP) – This program helps landowners restore and protect grassland, rangeland, pastureland, shrubland and other land, and provides assistance for grasslands rehabilitation activities.

Through these voluntary programs, NRCS is able to help private landowners improve air quality across the country. Since 2002, NRCS has provided over $49.8 million in direct financial and technical assistance to private landowners to install air quality conservation practices. (See graph).